

# 2010-2011

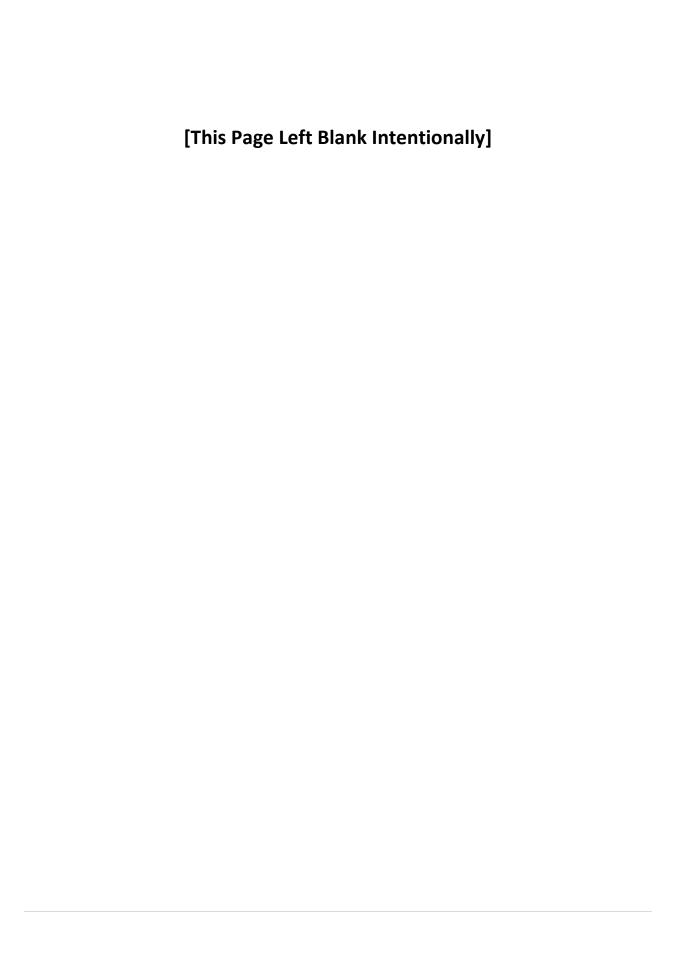
# Information Technology Services Strategic Plan





Gerald L. Fralick
State Chief Information Officer

State Of North Carolina 2010-2011



## Contents

Message from State CIO Gerald L. Fralick	1
Mission Statement of the State CIO and Office of Information Technology Services	3
Agency Goals	3
Agency Strategy	6
Planning by the State Chief Information Officer and Office of Information Technology Services	7
Development of the 2010-2011 Strategic Plan	9
Organization Chart for State CIO and Office of Information Technology Services	11
Division and Section Goals and Objectives	12
Office of the State Chief Information Officer	12
Strategic Planning	12
Enterprise Security and Risk Management Office	16
Policies and Communications	19
Statewide IT Procurement Office	20
Center for Geographic Information and Analysis	22
911 Board	24
Strategy for Office of the State CIO	25
ITS Operations	26
Compliance and Transformation	26
Personnel Services	27
Business Relationship Management (BRM)	29
Financial Management	30
Service Support	32
Service Delivery	34
Client and Network Services	36
ITS Operations Strategy	39



## Message from State CIO Gerald L. Fralick

I am pleased to submit this initial version of the Strategic Business Plan for the State Chief Information Officer (CIO) and Office of Information Technology Services (ITS), as required by Executive Order No. 3. The plan is based on material gathered from meetings with state agencies, input from my staff and regular discussions with vendors and other service providers.

By law, the mission of the State CIO is two-fold. Statewide responsibilities include establishing standards, overseeing statewide procurement and the state's 911 and geographic information system (GIS) efforts, and monitoring information technology projects. The State CIO also leads ITS, a very large IT service provider with a staff of approximately 600 professionals and an operating budget of approximately \$250 million annually. All of these efforts are designed to do one thing—to allow state agencies, public schools, community colleges, universities and local governments to deliver quality services to the citizens and businesses of North Carolina.

We strive to do this by minimizing costs, reducing duplication of services, and providing excellent enterprise services. We are a technical organization, but we try to emphasize customer service—without the agencies and citizens of North Carolina, there would be no need for us to exist. The relationship between the Office of the State CIO and ITS, with Governor Perdue's focus on efficiency, accountability and results, is a strong one. Most of the funding for the operations at our agency comes from the direct sale of our services to state agencies and local government—we have to be efficient and result driven.

ITS contributes to all of the Governor's priorities by making information technology more efficient, effective and secure across state government, and by providing IT infrastructure and services that are essential for the operations of state government.

For example, the State IT Plan prepared every two years by the State CIO helps set the strategic direction for information technology and encourages a statewide approach that is more cost-effective. This allows the state to do more with less.

The Enterprise Security and Risk Management Office helps keep North Carolina safe by protecting the security and integrity of citizen data.

Services delivered by ITS help all state agencies perform their duties, from creating jobs to positioning the state for economic recovery to turning around low performing schools. While we are a state agency, much of our work is outsourced to the private sector, which contributes to economic recovery. For example, more than 40 percent of the annual ITS budget, or \$80 million, is spent in the private sector on services. In the 2009-2010 fiscal year, payments to vendors of more than \$5,000 totaled \$135,755,977, or 72 percent of the total expenditure.

We are active participants in the OpenBook initiative, planned by the Governor to open up public spending in North Carolina. The web site was designed by ITS staff, as was the Recovery Office web site. These efforts contribute directly to the restoration of public trust in government.

As mentioned later in this report, each of the major service areas of ITS has undergone what we describe as a deep dive—a full review of the services, processes and costs to deliver services.

This helps ITS, and thus state agencies, do more with less.

I welcome any questions that you may have about this plan, and look forward to reviewing it with you and your staff.

Jerry Fralick

State Chief Information Officer

# Mission Statement of the State CIO and Office of Information Technology Services

To deliver customer-focused, efficient and effective IT services; drive efficiencies in information technology across state government; provide the framework for maintaining the security and integrity of citizen data, and keep projects on time and within budget.

# **Agency Goals**

To set agency goals, ITS selected measures from within the divisions that reflect the mission of the entire agency: project oversight, security, IT procurement and service delivery.

### **Project Oversight**

**Goal 1:** Increase knowledge and understanding of project management best practices in state agencies by providing training to IT staff in state agencies.

Measure: Pass Rate of Project Management Professional Certification Training

offered by the Enterprise Project Management Office (EPMO)

Data source: Agency records

2004	2005	2006	2007	2008	2009	2010	Target
100%	92%	90%	91%	82%	100%	100%	92%

**Goal 2:** Work with agencies to reduce the number of IT projects designated as "troubled" under the EPMO's measures.

**Measure:** Percentage of Projects that Need Agency Attention

**Data source:** Portfolio Project Management tool

2004	2005	2006	2007	2008	2009	2010	Target
NA	NA	13.4%	17.3%	21.1%	15.7%	10.1%	15%

#### Security

**Goal 3:** Help agencies maintain compliance with legal and regulatory requirements for the protection of state information assets.

Measures: Percent of audit activities with no major audit findings or non-compliant

conditions

Data Source: Agency assessments and audit reports and other supporting measures

2011	2012	2013	2014	2015	2016	2017	Target
Baseline							
							60%

#### **IT Procurement**

**Goal 4:** Analyze spending trends and abnormal quantity requests on state term contracts and identify strategic sourcing opportunities. Identify underutilized or inactive vendors contracts for end of life trends and overutilized vendor contracts for additional saving opportunities.

**Measure:** Annual dollar savings from bulk purchases and other efforts

**Data Source:** State term contract spend data, bid documents

2011 Baseline	2012	2013	2014	2015	2016	2017	Target
							\$5 million in savings annually

#### **IT Services**

**Goal 5:** Improve accuracy of license data, percentage of Service Level Agreements (SLAs) met and percentage of ITS projects completed on time and within budget.

Measures: Various

**Data Source:** Agency records

Measure	Baseline	Q1	Q2	Q3	Q4	Performance	Target
% Accuracy of asset & license data managed	0%						80% Data Accuracy

## Goal 6: Improve percentage of Service Level Agreement (SLAs) met.

Measure	Baseline	Q1	Q2	Q3	Q4	Performance	Target
% Achieve committed	90 + %						>90% /
Service Level							Service
Agreement (SLA)							
performance levels							

## **Goal 7:** Improve percentage of ITS projects completed on time and within budget.

Measure	Baseline	Q1	Q2	Q3	Q4	Performance	Target
% of Project milestones completed on time	0%						80%
% of projects completed on time	50%						75%

## **Agency Strategy**

The State CIO and ITS have a wide range of functions, from approving and monitoring large, complex IT projects to delivering IT services. As a result, the agency will employ a variety of strategies for meeting and exceeding the goals and measures in each division.

ITS has a number of tools and frameworks for compiling performance metrics:

- Remedy is software used by the service desk and many staff members to track all
  incidents and service requests. Remedy also produces service metrics such as time
  needed to address a request, the number of hand-offs of an incident between teams,
  and monthly reports such as SLA performance.
- ITIL—a framework for IT process improvement based on the Information Technology
  Infrastructure Library. ITIL provides a systematic and logical view of key technology
  processes and allows the staff to see the linkages between processes.
- PPM—Program Portfolio Management—a set of tools that allows the state to examine its existing library of software applications in multiple ways. It also is used to track IT projects from design to implementation. Agencies know what has to be delivered when, and their progress can be measured. The EPMO uses the PPM tool to identify projects that start to miss deadlines or deliverables early in the process so that technical assistance or management attention can be applied so as to avoid subsequent failure.
- Innotas—a project management tool that allows staff members to track hours and project achievements over time.

Together, ITS uses these sets of tools to track the program metrics mentioned in this plan and in the Results Based Budgeting process. Each month, metrics are reported to the managers from the tools. Agency metrics are prepared for the departmental CIOs and for the Business Relationship Manager (BRM) assigned to that agency by ITS. These metrics are discussed by the BRM staff member at the monthly service review and any metrics that are outside the Service Level Agreement are reviewed.

Also, each month the SCIO meets with the agency CIOs to discuss new potential services, budgets, rates and existing services. The feedback from these meetings is brought back to the ITS managers and incorporated into their planning for service improvements.

In setting the strategic direction for IT in state government, ITS will continue working to increase and improve communication with both the technical and business leaders of state

agencies. State CIO staff are currently working on a new governance structure that is designed to give agencies and other ITS customers a more significant role in charting the direction of IT.

Strategies for the State CIO's statewide responsibilities and for ITS operations are discussed in more detail in those sections of the plan.

# Planning by the State Chief Information Officer and Office of Information Technology Services

Almost all of the work of the Office of the State Chief Information Officer (SCIO) and its operational division, the Office of Information Technology Services (ITS), is dependent on the technical and business needs of other state agencies, public schools, community colleges, universities and local governments. The Office of the SCIO establishes policy and standards in security, program management, geographic information systems, and technical architecture and operates the 911 Board.

ITS is responsible for the planning, operation and maintenance of a complex suite of technical services, from mainframe and distributed hosting; networking; voice and data; wireless; enterprise services such as e-mail and calendar and the common payment services; video and web-based conferencing; to the operation of the state's web portal. With such a wide array of services and responsibilities, the planning for future and ongoing services is a complex endeavor in itself.

Contact with state agencies is continuous and is both formal and informal. For example, each year the Enterprise Security and Risk Management Office (ESRMO) surveys state agencies to solicit ideas for improving the statewide security manual. The ESRMO staff also examines new trends in security policy and incorporates both into draft policies. The drafts are then circulated to the agencies and they are given an opportunity to comment on the standards and guidelines prior to formal adoption. The ESRMO also works with state agencies on the development of their Disaster Recovery and Continuity of Operations Plans. Agency needs are fed into the development of the ITS Disaster Recovery Plan.

By statute, the State CIO prepares a statewide technology plan prior to the beginning of each long session of the N.C. General Assembly. Planning work on the statewide technology plan begins a full year prior to its submission. The staff of the Chief Technology Officer (CTO) works with agencies to determine their needs for technical services to support their ongoing business functions. The staff also assists agencies on the development of the departmental technical plans, which generate content for the statewide plan. This year, a subset of the agency CIOs also actively participated in the development of the statewide plan, reviewing the drafts and recommending changes and enhancements.

As an agency, ITS also completes a technology plan. Its ongoing focus has been developing and delivering high-quality and cost effective services in a customer responsive manner. Several years ago, management at ITS became concerned that ITS had become focused too narrowly and technically, and not on the business needs of the agencies. After examining several frameworks for technology operations, ITS management decided to invest a great proportion of its training dollars in an Operational Excellence Program, by following the concepts of the Information Technology Infrastructure Library (ITIL), an internationally recognized framework of service delivery and service support. Most staff at ITS have become certified in the ITIL Foundational principles, and many have gone on to take second and third level courses in the ITIL principles.

The principles have been incorporated into operational services delivery. One of the tenets of ITIL is measurement to result in continuous improvement. ITS uses the logging and tracking feature of a commercial software package called Remedy to monitor how long it takes incidents or service requests to be fulfilled. Each month, a report is prepared for the larger clients that show how their incidents and requests have been handled. The report is discussed in detail with the agency CIO and their business leaders.

If ITS does not deliver the expected levels of service to a client according to a mutual agreement called a Service Level Agreement, or SLA, it reports this not only to the agency but to the Office of Budget and Management and the General Assembly's Fiscal Research division. ITS is adding a client service satisfaction survey and service availability measures to its package of reports. All of this data is being used to improve service delivery and planning for new services.

During Fiscal Year 2010-11, ITS senior staff has participated in service "deep dives" where the planning and execution of each service has been examined in an attempt to drive out extraneous processes and costs. The results of the "deep dives" were incorporated into the technology plan and the metrics for the services are being included in this strategic plan.

One of the concepts being implemented at ITS is for each employee to have key metrics in their Personnel Management Plan that tie to the goal and objectives of the section and of ITS as a whole. In this way, metrics will be "baked" in to the performance of each staff member and will help drive agency performance.

For the next iteration of the Office of the State CIO and ITS Business Plan, staff will collect data from each of these previously mentioned sources, especially the Operational Excellence Program's service statistics to report on the agreed-on metrics.

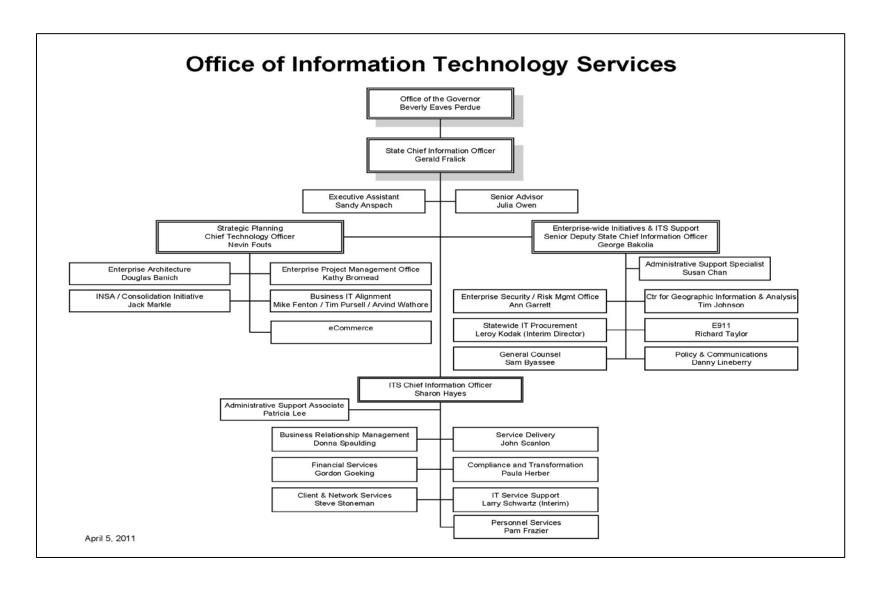
# Development of the 2010-2011 Strategic Plan

The current SCIO/ITS Strategic Plan started with the Results Based Budgeting (RBB) material previously submitted to the Office of Budget and Management. ITS had also completed a departmental Technology Plan, and the Office of the State CIO, working with both internal staff and agency staff from key departments, had developed a Statewide Technology Plan. These three sources were used to build this Strategic Business Plan.

Goals, objectives and specific metrics had been prepared by the managers of the various sections of ITS and the State CIO's Office for RBB. The Policy and Planning section was given the responsibility of bringing the material together into a coherent whole and being sure that the goals, objectives and metrics were consistent across sections. They also incorporated the mandatory material from the RBB. A framework was developed and the individual section's materials were inserted. The draft sections were first reviewed by the managers, and then the entire draft was reviewed by senior management. Recommendations from senior management were incorporated, and the plan was then submitted to the Office of Budget and Management for review. OSBM's comments have been incorporated into the final plan.

The executive branch agencies are currently participating in a major external study of the state's technology infrastructure. The study is detailed later in this plan. It is expected that the results of this study will be a major determinant of the future direction of IT in the near future. It may also have a profound impact on the development of the next business plan for the Office of the State CIO and ITS, as could the Governor's plan for the consolidation of major departments.

# Organization Chart for State CIO and Office of Information Technology Services





# **Division and Section Goals and Objectives**

## Office of the State Chief Information Officer

# **Strategic Planning**

Nevin Fouts, Chief Technology Officer

**Mission:** Provide strategic support for the State CIO and technology direction and oversight for State agencies

The current mix of Budget Centers supporting these objectives for Strategy and Initiatives is as follows:

**Enterprise Architecture** 

**Enterprise Project Management Office** 

Consolidation

The new mix of Budget Centers supporting these objectives will be changed to:

Strategic planning and technology direction

Strategic initiatives

Project oversight and governance strategy

Consolidation

### **Objectives**

Provide <u>strategic planning and technology direction</u> on the proper investment and use of technology to further the State's overall objectives, including:

- Research on emerging technologies and industry trends
- Regularly advise the State CIO and ITS CIO
- Educate agency IT organizations and provide technical guidance to enterprise-class projects
- Collaborate and share with agency IT and business management to help assure strategic direction
- Produce a biennial State IT Plan; update semi-annually
- Publish and maintain the Statewide Technical Architecture, roadmaps for key technologies, and Statewide technical standards

Provide leadership and resource support for <u>strategic initiatives</u> as defined in the State IT plan, including:

- State Portal initiative
- Private cloud computing and on-demand services
- Directory services
- Mobility and unified communications
- Video and web conferencing services

Provide project oversight and governance strategy for enterprise IT activities:

- Institute and sustain an enterprise IT portfolio management strategy to improve the management of IT-related projects through coordination and communication, standardization and measurement, and mentoring and coaching
- Assist the State CIO in carrying out the statutory authority for IT project approval and oversight by applying professional experience and best practices and by providing full and complete information about Agency plans and projects

- Improve the management of IT investments by providing expert advice and formal training on the underlying theories and concepts of portfolio management; improve overall return on IT investment through review of the solutions in the state application portfolio
- Review major projects to provide architectural oversight and guidance and to assist agencies with the management of large, complex projects
- Maintain statewide information technology standards to ensure that designs are cost effective and based on proven technical architectures
- Manage and enhance the project oversight and gate process methodology

Identify and pursue opportunities for <u>consolidation</u> of State IT resources to maximize enterprise benefits:

- Identify duplicative IT systems and processes
- Seek opportunities to leverage economies of scale and maximize synergies
- Recommend specific initiatives, projects, and/or research
- Support business process consolidation initiatives

**Goal 1:** Increase knowledge and understanding of project management best practices by providing training to IT staff in state agencies.

Measure: Pass Rate of Project Management Professional Certification Training

offered by the Enterprise Project Management Office

**Data source:** Agency records

2004	2005	2006	2007	2008	2009	2010	Target
100%	92%	90%	91%	82%	100%	100%	92%

**Goal 2:** Work with agencies to reduce the number of IT projects designated as "troubled" under the EPMO's measures.

**Measure:** Percentage of Projects that Need Agency Attention

**Data source:** Portfolio Project Management tool

2004	2005	2006	2007	2008	2009	2010	Target
NA	NA	13.4%	17.3%	21.1%	15.7%	10.1%	15%

**Goal 3:** Provide visibility into IT strategy and technology direction for state agencies by updating the biennial State IT Plan on a semi-annual basis.

Measure: Number of times an updated version of state IT plan is published onto

State CIO website after incorporating impact of ongoing initiatives and

agency feedback

**Data source:** The State CIO website and Agency CIO collaboration portal

2011 Baseline	2012	2013	2014	2015	2016	2017	Target
							Twice / year

**Goal 4:** Research emerging technologies, industry trends, and develop/share roadmaps for technologies that are relevant to State business needs.

**Measure:** Percentage of roadmaps that are updated every year

**Data source**: Agency CIO collaboration portal

2011 Baseline	2012	2013	2014	2015	2016	2017	Target
							100%

**Goal 5:** Provide leadership and resource support for executing strategic initiatives as defined in the State IT plan.

**Measure:** Percentage of initiatives executed as described in the State IT plan

**Data source**: Agency CIO collaboration portal

2011 Baseline	2012	2013	2014	2015	2016	2017	Target
							100%

## **Enterprise-wide Initiatives and ITS Support**

George Bakolia, Senior Deputy State Chief Information Officer

## **Enterprise Security and Risk Management Office**

Ann Garrett, Director

**Mission:** The Enterprise Security and Risk Management Office (ESRMO) provides leadership in the development, delivery and maintenance of an information security and risk management program that safeguards the state's information assets and the supporting infrastructure against unauthorized use, disclosure, modification, damage or loss. A strong statewide program provides a framework for a secure, sustainable and compliant e-business environment that encourages e-commerce, discourages fraud and corruption, keeps citizen data available and safe, and maintains public trust.

#### **Objectives**

- Protect the confidentiality, integrity and availability of citizens' data
- Promote a safe and secure information technology operations environment by establishing standards and guidelines for agencies to follow
- Coordinate statewide security and risk management communication
- Serve as an advisor on risk management and security for statewide information technology projects
- Identify and provide guidance on risk management, business continuity planning, audits and compliance

**Goal 1:** Help agencies maintain compliance with legal and regulatory requirements for the protection of state information assets.

State agencies are required to comply with a myriad of ever changing legal and regulatory requirements to protect state data. Therefore, agency security assessments and audit activities are important to promote awareness of compliance standards and to measure compliance with such standards.

Measures: Percentage of audit activities with no major audit findings or non-

compliant conditions

**Data source:** Agency assessments and audit reports and other supporting measures

2011	2012	2013	2014	2015	2016	2017	Target
Baseline							
							60%

**Goal 2:** Update the State Security Manual annually in a timely manner.

Measures: Timeliness of Security Manual review and update based on date manual

is complete and released to policy team

Data source: Agency records

2011	2012	2013	2014	2015	2016	2017	Target:
							On Time/Days
							Late
Baseline							On Time

**Goal 2:** Improve agency awareness of state and federal security standards though training and education.

Support a statewide security and risk management training and awareness program that serves a wide range of needs from general staff awareness to specific training for information security

and business continuity management professionals. Such training focuses on developing skills in relevant technologies and techniques that will improve agencies' security posture and covers any security manual updates. Direct state participation in cyber security exercises like the Department of Homeland Security Cyber Storm III national exercise. A user security policy maintenance program with a security awareness training program assists state agencies in preserving the confidentiality, integrity, and availability of state information resources.

Measures: Number of agencies, departments and organizations reached by training

and awareness activities, including training sessions, newsletters and

webinars

**Data source:** Agency records

2011 Baseline	2012	2013	2014	2015	2016	2017	Target
							20

**Goal 3:** Support agency business continuity planning efforts so that agency critical applications have adequate back-up and are periodically tested.

**Measures**: Percent of agency Business Continuity Plans submitted with no gaps in

planning areas

**Data source:** Agency reported data in the Application Portfolio Management (APM) tool, agency business continuity plans and plan evaluations, ITS operational disaster recovery test records and agency feedback

2011	2012	2013	2014	2015	2016	2017	Target
Baseline							
							85%

#### **Policies and Communications**

Danny Lineberry, Director

**Mission:** To drive policy development for ITS and the State CIO and to provide timely and accurate information and assistance to citizens, legislators and state agencies.

#### **Objectives**

- Help develop sound, reasonable, defensible policies for ITS and the State CIO
- Regularly update the State CIO and ITS web pages and social media
- Provide assistance to the State CIO and ITS in all communications matters

**Goal 1:** Annually review and update processes for developing ITS and statewide IT policies, and publish updates to the State CIO and other web pages on time.

Measure: Timely completion of review and update

Data source: Agency records

2011	2012	2013	2014	2015	2016	2017	Target:
							On Time/Days Late
Baseline							On Time

**Goal 2:** Annually review and update statewide Security Manual and publish updates to the appropriate web pages.

**Measure**: Timely completion of review and update

Data source: Agency records

2011	2012	2013	2014	2015	2016	2017	Target:
							On Time/Days Late
Baseline							On Time

**Goal 3:** Generate and post at least three updates weekly to the State CIO's web page and social media.

Measure: Number of updates posted

**Data source:** Agency records

1 Q	2 Q	3 Q	4Q	1Q	2Q	3Q	Target
2011	2011	2011	2011	2012	2012	2012	
Baseline							12/Quarter

**Goal 4:** Provide an initial response to public records requests within 24 hours of receipt, including an explanation of the agency's policies and procedures regarding public records requests.

**Measure:** Time required for initial response and completeness of response

**Data source:** Agency records

1 Q	2 Q	3 Q	4Q	1Q	2Q	3Q	Target
2011	2011	2011	2011	2012	2012	2012	100%
Baseline							100%

## **Statewide IT Procurement Office**

Leroy Kodak, Acting Director

**Mission:** To efficiently procure information technology (IT) goods and services for state agencies and institutions at the best value to the state, pursuant to state law and rules.

#### **Objectives**

- Assist state agencies and institutions in the procurement of IT goods and services at the best value to the state
- Ensure that IT procurements are consistent with state law and rules

 Assist state agencies and institutions in the creation of solicitation documents and establish contracts for IT goods and services

**Goal 1:** Analyze spending trends and abnormal quantity requests on state term contracts and identify strategic sourcing opportunities. Identify underutilized or inactive vendors contracts for end of life trends and over-utilized vendor contracts for additional saving opportunities. For example, strategic sourcing procedures and processes for PCs, laptops and printers have been in place since 2005 for state agencies. This initiative has saved the state \$44,209,635.75 since 2005.

**Measure:** Annual dollar savings from bulk purchases and other efforts

**Data source:** State term contract spend data, bid documents

2011	2012	2013	2014	2015	2016	2017	Target
Baseline							
							\$5 million in
							savings annually

**Goal 2:** Provide accurate procurement bid and award information to state agencies, institutions, vendors, the public, and to OpenBook for more transparency in government. Update and transfer procurement database information to OpenBook. Ensure data accuracy using bid procedure reviews, data scrubbing, audit checks and commodity code verifications.

**Measure:** Accuracy of records

Data source: Procurement databases, state term contracts, bid documents, agency

records

2011	2012	2013	2014	2015	2016	2017	Target
Baseline							
							95% Accuracy

**Goal 3:** Provide procurement education, training and assistance to state agencies and institutions. Provide a professional resource to state agencies and institutions concerning bid development, procurement policies and procedures questions and bid evaluation assistance. Provide a source for constant requests from state agencies, institutions, vendors and media outlets for bid contract information, procurement policies and procedures, bid award information and historic procurement data.

Measure: Percentage of bid information requests handled annually within 15 days

of receipt

**Data source:** Agency records

2011	2012	2013	2014	2015	2016	2017	Target
Baseline							
							100%

## **Center for Geographic Information and Analysis**

Tim Johnson, Director

**Mission:** The Center for Geographic Information and Analysis (CGIA) is the lead agency for geographic information systems (GIS) services and GIS coordination for the State of North Carolina.

#### **Objectives**

- Bring the statewide GIS community together to achieve data sharing, informed decision-making, and cost efficiencies
- Operate NC OneMap, the framework for public access to geospatial data, under the direction of the NC Geographic Information Coordinating Council (GICC)
- Provide GIS services to federal, state and local government agencies, other public sector agencies, and non-profit organizations

**Goal 1:** Support policies, strategies, best practices, and initiatives of the GICC with timely analysis, reports, planning, and communications.

**Measure:** GIS-oriented strategic documents, business plans, and policy statements

completed

**Data source:** GICC and CGIA records

2011 Baseline	2013	2014	2015	2016	2017	Target
						6

**Goal 2**: Provide free public access to geospatial data from many public sector providers statewide to save time, do more, and support effective decisions in local and state government, private business, and education. Data includes orthoimagery, roads, political boundaries, rivers and streams, and other critical geospatial data.

**Measure:** Users obtaining data from NC OneMap (based on website visits)

**Data source:** Web statistics from <a href="https://www.nconemap.gov">www.nconemap.gov</a> showing number of visits to NC

OneMap

2011	2012	2013	2014	2015	2016	2017	Target
Baseline							
							45,000

**Goal 3:** Provide high quality GIS services to federal, state, and local government agencies and non-profit clients in support of projects related to economic development, transportation planning, emergency response, environmental quality and other public purposes.

Measure: Dollar value of contract work completed

**Data source:** GIS service project records

2011	2012	2013	2014	2015	2016	2017	Target
Baseline							
							\$574,000

#### 911 Board

Richard Taylor, Executive Director

**Mission:** To support the 911 Board in the administration of the 911 Fund and to provide the leadership for the deployment and use of the 911 emergency system in North Carolina.

#### **Objectives**

- Implement the 911 State Plan that considers trends in voice communications service technology and in enhanced 911 service technology
- Investigate and incorporate GIS mapping and other resources into the plan, and formulate strategies for the efficient and effective delivery of enhanced 911 service
- Distribute revenue in the 911 Fund to providers and public safety answering points and to advise both of the requirements for receiving funds
- Establish policies and procedures to fund advisory services and training
- Ensure compliance with requirements for the use of money distributed from the 911
   Fund
- Establish Public Safety Answering Point (PSAP) operational standards and provide funding in accordance with the policies, procedures and standards.
- Design, create or acquire printed or web-based public education materials regarding the proper use of 911

**Goal 1:** To ensure residents and visitors to North Carolina have immediate access to law enforcement, fire and medical first responders through an effective and efficient 911 system.

Measure: Percentage of PSAPs adopting 911 Board Standards Implementation

Data source: Staff reports, and State 911 Conference with the 911 trade associations

2011	2012	2013	2014	2015	2016	2017	Target
Baseline							
0%							100%

**Goal 2:** Provide necessary funding for the effective and efficient operation of each of the state's Public Safety Answering Points (911 centers).

Measure: PSAP grant applications funded

**Data source:** Annual Revenue/Expenditure PSAP Reports

2011	2012	2013	2014	2015	2016	2017	Target
Baseline							
75%							95%

**Goal 3:** Conduct PSAP site visits and training sessions to educate agencies regarding adoption and implementation of standards and the new funding model.

Measure: Percentage of PSAPs visited by staff annually

**Data source:** Feedback from PSAPs, 911 Board staff monthly reports

2011	2012	2013	2014	2015	2016	2017	Target
Baseline							
							100%

# Strategy for Office of the State CIO

Education is the primary component of the strategy for meeting and improving upon the goals and measures of the State CIO's statewide responsibilities. From the Enterprise Project Management Office providing training to help state employees become certified project managers to the Chief Technology Officer offering sessions on IT best practices, the State CIO strives to raise the understanding of IT best practices, trends and developments.

Specific, targeted training will be developed to fit specific goals and measures, as needed.

The State CIO will use the Program Portfolio Management (PPM) tool to monitor IT projects and generate and update reports that help policy makers make informed decisions about the best course for improving the efficiency and effectiveness of information technology.



Sharon Hayes, ITS Chief Information Officer

# **Compliance and Transformation**

Paula Herber, Director

**Mission:** Drive consistent, compliant, and sustainable processes by managing information needed to enable decision makers to achieve their business goals.

## **Objectives**

- Ensure ITS operational compliance
- Enable cost savings
- Support and manage the Information Technology Infrastructure Library (ITIL) Service Management Framework
- Facilitate service and process improvements

Deliver service and process reporting

#### **Goals:**

Measure	Baseline	Q1	Q2	Q3	Q4	Performance	Target
% of scheduled	0%						90%
vulnerability scans							
complete							
% of Information	50%						95%
Technology							
Infrastructure Library							
(ITIL) process							
quarterly releases are							
on time							
% of Disaster	100%						100%
Recovery (DR) tests							
are executed on time							

% of ITS critical	100%			100%
applications with				
adequate back-up and				
tested				

#### Notes:

- (1) As part of the annual assessments, ITS Information Security will provide an optional network penetration scanning service for ITS and consolidated agencies as required by the General Statute 147-33.111.
- (2) The Operational Excellence Program (OEP) will drive the standardization of processes in an effort to increase operation automation and help reduce service delivery costs. ITS will be implementing ITIL V3 in alignment with the Remedy 7.6 rollout.
- (3) ITS provides continuity of operations planning (COOP) and disaster recovery (DR) testing for identified agencies. ITS will focus on building a COOP and DR infrastructure service that meets the needs of consolidated agencies.
- (4) ITS critical applications have adequate back-ups and have been successfully tested during annual DR testing. Application data is kept up to date in Application Portfolio Management (APM) and Living Disaster Recovery Planning System (LDRPS).

#### **Personnel Services**

Pam Frazier, Director

**Mission:** The Human Resources Office, in partnership with the agency management, supports the mission of Information Technology Services by committing to sustaining a high performance workforce. The HR office achieves this by providing accurate, timely and consistent personnel services to Information Technology Services employees for purposes of: recruitment and retention, position management, salary administration, performance management, employee relations, Equal Employment Opportunity, worker's compensation, records management, benefits and policy development.

### **Objectives**

- Ensure ITS human resource program compliance
- Acquire talent and skills necessary to meet operational objectives
- Support functional human resource needs
- Enable best practices for human resource management

#### Goals:

Measure	Baseline	Q1	Q2	Q3	Q4	Performance	Target
Department Turnover	0%						<5%
Rate							
Turnover rate for new	0%						<5%
employees							
Time to process	< 60 days						95%< 30
separations							days
Time to Process	<60 days						95% < 30
Change Actions							days
% Employee	15%						20%
Teleworking							

#### Notes:

- (1) Retention efforts are in place to reduce voluntary turnover. When vacancies occur, the position is evaluated to determine if the service of the former employee is needed to ensure there are no customer or SLA impacts to ITS services.
- (2) Effectively train new employees and retrain existing employees to match the needs of the agency.
- (3) Percentage of all separations are processed within 30 days, avoiding unnecessary costs to the state through incorrect payment.
- (4)All position changes are processed within 30 days, avoiding errors in employee pay and reducing unnecessary costs to the state.
- (5) To improve efficiency, reduce costs, support green initiatives and increase productivity, ITS implemented a teleworking program which enables employees to work remotely.

## **Business Relationship Management (BRM)**

Donna Spaulding, Director

**Mission:** Build and maintain collaborative, transparent and trusting relationships with the customers we serve by advocating on their behalf, ensuring that ITS services satisfy their existing and future business requirements, and that ITS is delivering on its Service Level Agreements (SLAs).

## **Objectives**

- Negotiate signed Master SLAs for all remaining Executive Branch state agencies
- Direct the initiation of the ITS Web Presence Program
- Promote the objectives and direction of ITS service offerings and help drive positive results with state agencies and ITS customers
- Be an effective liaison between ITS and its customers by executing effective communications, information sharing and issue mitigation
- Develop and mature the ITS Service Level Management process with a focus on full engagement in Operational Excellence Process processes throughout the organization
- Enhance the value of the metrics and increase the awareness and compliance of SLAs, based on ITIL principles, industry best practices and customer input

#### Goals:

Measure	Baseline	Q1	Q2	Q3	Q4	Performance	Target
Increased % of signed	48%						65%
SLAs with executive							
branch agencies							
Conduct regular	50 /qtr						200 yr.
Service Review							
Meetings with state							
agency customers							
Increase # of	1700						3000
subscribers to the							
customer							
communication hub							

#### Notes:

- (1) Continue to drive obtaining signed SLAs with executive branch agencies.
- (2) One service review meeting per agency per quarter at minimum; monthly meetings for large agencies.
- (3) The customer communications hub is the definitive source of communication for ITS operations. Increasing the subscriptions to the communications hub will promote and enhance effective communications with our customers.

## **Financial Management**

Gordon Goeking, Chief Financial Officer

**Mission:** Provide central accounting and financial management services for the Office of Information Technology Services in support of its product and service offerings, with a focus on cost effectiveness, transparency and accountability, and to provide accurate and timely financial analysis and reporting.

#### **Objectives**

- Agency financial reports are accurate and complete by the required due date at the end
  of each month.
- Agency is monitoring expenditures and managing resources to ensure accounts are not over spent.
- Provide accurate and understandable billing and e-rate information to each agency/customer.
- Improve the Contract Management and Administration Program so it meets current business requirements.
- Ensure ITS is reporting accurate and timely financial reports to OSBM, the General Assembly and the Office of the State Controller.

#### Goals:

Measure	Baseline	Q1	Q2	Q3	Q4	Performance	Target
Timeliness of month	67%						100%
end reporting.							
% of accounts over	13%						10%
spent by the end of							
each quarter							
Customer satisfaction	N/A						65%
with billing and							
supported							
information provided							
Contract management	N/A						100%
deliverables delivered							
on time.							

#### Notes:

- (1) Month end reports are accurate and complete by the 9<sup>th</sup> working day of the following month with submission to the OSC by the 10<sup>th</sup> working day of the month.
- (2) Over-expenditures are calculated at the end of each quarter and apply to all operating codes.
- (3) Business process documented for order to cash workflow ensuring customer satisfaction with invoices resulting in transparent customer bills.
- (4) Create a center of excellence for contract management. Update and expand the solicitation template by 6/30/11. Reorganize, update and edit Chapter 13 of the ITS Policy Manual (Purchase and Contracts) by 9/30/11. Incorporate training for contract monitoring as a segment in the ITS Personnel training policy and procedure (manage and staff version) by 12/31/11. Focus for this cycle will be strategic contracts.

## **Service Support**

Larry Schwartz, Interim Director

**Mission:** To deliver operational support efficiencies for ITS by executing our processes, maintaining clear communications, and providing integrated support functions while achieving the service targets as defined by Service Delivery.

#### **Objectives**

- Ensure efficient use of the Core Support Processes as defined by the ITS Operational Excellence Program (Incident, Problem, Configuration, Change and Release Management)
- Collaborate with Service Delivery and other ITS teams, helping to ensure that the businesses we support are providing a consistent set of services and meeting defined expectations:
  - Provide the underlying Operational process focus to complement the tactical process focus of Service Delivery
  - Meet service levels in support of service delivery
  - o Ensure effective implementation and support of the operational support model
  - Efficiently manage the planning horizon, focusing on the operational requirement of Hours-to-Days supporting the Service Delivery horizon of Weeksto-Months
  - Collaborate with Service Delivery ensuring the end user experience is consistent with their management oriented experience
- Prioritize work activities based on prioritization models and SLA commitments
- Manage issues through proper communication and escalation activities
- Continue to develop staff to provide depth and breadth of skills and experience to adequately support all operational areas

#### Goals:

Measure	Baseline	Q1	Q2	Q3	Q4	Performance	Target
Integration of Asset							
Management/CMDB*							_
Complete review	NA						Q1'11
and training of							
overall Asset							
Management/CM							
DB Process	NI A						02 111
Review and adjust	NA						Q2 '11

internal team processes to align with overall process • Review and adjust internal work	NA				Q2 '11
instructions					
Virtualization Deployment				1	
Complete     deployment of     Version 4     environment by	NA				Q4'11
<ul><li>April 1, 2011</li><li>Production</li><li>Version 4</li><li>environment</li></ul>	NA				Q1'11
available for new hosted services by July 1, 2011					

<sup>\*</sup> Configuration Management Database

### Notes:

- (1) Service Support will continue with process integration of the Asset Management/CMDB master process to ensure compliance.
- (2) Service Support will refresh and upgrade the virtual x86 server environment in order to reduce hosting costs and expand over all efficiencies of the service.

## **Service Delivery**

John Scanlon, Director

**Mission:** Provide a comprehensive, reliable, and cost-effective portfolio of enterprise-class business applications, computing platforms, and network and telecommunications infrastructure services to the State of North Carolina. Partnering with state agencies and local governments, we are dedicated to conceiving, deploying, maintaining, and supporting an innovative and mission-critical suite of IT service offerings while meeting or exceeding expectations for customer service and support.

#### **Objectives**

- Ensure services meet customer business requirements, and remain relevant
- Ensure overall quality, reliability, availability, and resiliency of each service
- Ensure services are managed effectively and provide a strong customer value proposition
- Ensure customer satisfaction with each service
- Achieve committed SLA performance levels

#### Goals:

Measure	Baseline	Q1	Q2	Q3	Q4	Performance	Target
% of Infrastructure	0%						80%
Study and Assessment							
(INSA) milestones							
Completed on time							
% Accuracy of asset &	0%						80%
license data managed							Data
							Accuracy
% of Savings through	0%						2-5% /
contract							Contract
renegotiations							
% Saving associated	0%						0-5% /
with optimization							Service*
% Achieve committed	90 + %						>90% /
SLA performance							Service

levels				
% of Project milestones completed on time	0%			80%
% of Service Rates market competitive **	75%			80-85%
% of projects completed within budget	90%			95%
% of projects completed on time	50%			75%

- \* Indicates Services that are in scope for Technology Optimization
- \*\* Measured per Service across all Priority Levels
- \*\*\* Market Competitive is defined as within 10% of Market rate for identical Service Offering.

#### Notes:

- (1) The Infrastructure Study and Assessment (INSA) is the assessment of IT infrastructure services and costs across all cabinet agencies requested by Governor Perdue with goals to improve service, increase transparency, improve efficiency and reduce IT infrastructure costs.
- (2) Asset and License Lifecycle Management requires the integration of people, processes, and systems to manage and optimize the use of hardware, software, license and virtual assets used in the delivery of ITS services.
- (3) In an effort to reduce overall operating costs and achieve the highest level of value for ITS and its customers, ITS will renegotiate vendor contracts where possible to reduce total cost to the state while increasing the associated value proposition associated with those contracts, resulting in potential rate decreases for ITS customers.
- (4) Optimization of the state's IT infrastructure and assets will support the delivery of services which are more quickly, easily, and effectively provisioned, deployed, and managed. This

should yield operational efficiencies, reduced operational cost and ultimately lower rates for ITS customers.

- (5) Drive achievement of Service Level Agreement performance levels as agreed in customer SLAs for each service.
- (6 & 7) Multiple service improvement projects and initiatives are included in the ITS Strategic IT Plan which will accomplish a combination of lowering operating costs and rates, improve service quality, and improve the delivery/provision of services to our customers.

(8&9) ITS will use data reported in the PPM tool to determine the cost variance for all active projects (use variance between the forecasted budget and the original baseline budget as determined after the planning and design phase). The agency will use data reported in the PPM tool to determine the variance from the baseline end date for all active projects (use variance between the forecast end date and original baseline end date). Within budget is defined as  $\pm 5\%$  actual versus budgeted. Within schedule is defined as  $\pm 10\%$  actual versus planned duration.

#### **Client and Network Services**

Steve Stoneman, Director

**Mission:** Facilitate the restoration of normal operational service with minimal business impact to our customers within agreed to service levels. Client Services includes the service desk support for all ITS services, support for managed desktops and laptops, local area networks for client agencies, and unified communications including email and archiving and printer services. We also provide the field services team for deployment to agency locations for incidents and requests in support of desktop, local area network (LAN), wide area network (WAN), video, voice and security.

## **Objectives**

- Increased customer satisfaction
- Increased First Call Resolution
- Desktop support efficiencies through the use of remote management systems and support
- WAN Customer Premise equipment upgrade
- Onboard all ITS Exchange email users to Email Archiving solution per EO18
- Onboard remaining executive branch agencies to centralized email system
- Microsoft Exchange Service Improvements
- Desktop/Laptop Refresh
- Improve Asset and Billing data integrity
- Upgrade standard desktop image to Windows7 and Office 2010

#### Measures

Measure	Baseline	Q1	Q2	Q3	Q4	Performance	Target
% Of Customer Survey	0%	0%	86.5%				90%
responses with overall							
"Very Satisfied"							
% Of Customer Survey	0%	0%	97.5%				98%
response with overall							
"Satisfied" or higher							
% Incidents called into	50%	50%	52%				65%
the Service Desk and							
resolved while the							
customer is on the							
phone							
% of desktop	32%	32%	48%				65%
incidents resolved							
without dispatching a							
technician to the							
customer site.							
% Executive branch	65%	69%	88%				90%
agencies on-boarded							
to ITS central email							
system and utilizing							

the single a mail					
the single e-mail					
archive system per					
Executive Order 18					
% of Required	24%	20%	37%		100%
Desktop/Laptop					
refreshes completed					
per SLA					
·					
% Desktop asset data	80%	80%	85%		98%
and billing accuracy					
% of new systems	0%	0%	0%		100%
being deployed with					
Windows 7 and Office					
2010					
% reduction in	0%				10%
infrastructure					
management					
applications					

#### Notes:

- (1-3) Position the ITS Service Desk as the IT Enterprise Service Desk for the State of NC executive branch agencies.
- (4) Continue maturity of implementation and usage of remote management support tools. Staff efficiencies and customer satisfaction improvements will be met.
- (5) Onboard all ITS Exchange Email users to a single Email archiving solution per EO18.
- (6)Desktop/Laptop Refresh. Backlog is being managed and focus is on meeting SLA performance.
- (7) Improve asset and billing data integrity.
- (8) Upgrade standard desktop image to Windows7 and Office 2010.
- (9) ITS will address the organization's application platforms across capabilities in order to provide optimization toward an efficient IT. ITS will be looking to optimize strategic applications and consolidate functionality where applicable.

## ITS Operations Strategy

Metrics from the various tools mentioned in the agency strategy will be used to determine service performance and areas of strengths and weaknesses of service delivery. The results will also be incorporated in the Results Based Budgeting initiative.

Each month the results of the metrics are summarized and discussed at senior staff level meetings. Certain areas of the operation may be chosen for further training or education to be sure that issues unveiled by the metrics are addressed.

In addition, any major incidents are isolated for further study and a root cause analysis is started. The results of the root cause analysis are shared with client agencies and with ITS staff. The purpose of the root cause analysis is to determine what happened, what caused the incident and if there was a breakdown in process. The results of the root cause analysis are then incorporated into process improvements such as increasing communications with clients so that they know the status of the major incident as it is unfolding, or escalating the incident with a vendor earlier, etc.

The Service Desk is also conducting a customer satisfaction survey with clients who call or email in incidents or service requests. This is a new initiative, but the first reports have shown a high level of customer satisfaction with the work performed.

While both ITS and the Office of the State CIO have asked for and used both client and staff feedback in prior planning efforts, with the exception of the State Technology Plan, the focus has often been on specific services and projects rather than on the overall strengths and weaknesses of the entire organization. This past year we entered into a major contract with a vendor to conduct an assessment of the technology infrastructure of state government—both at the agency and state level. The results of the Information Technology Infrastructure Study and Assessment are due to be released later this spring.

The results of this major study could have profound impacts on the service delivery model for technology. Therefore, one of the key planning efforts for the next biennial strategic business plans will be the examination of the recommendations from the vendor and its subsequent incorporation into the ITS Strategic Business Plan and Results Based Business initiative.

ITS is working with both agency technology leaders and senior business representatives on the INSA study. Agency staff, including staff from ITS, have participated in developing data for the infrastructure study. All recommendations will be reviewed by senior staff before

implementation plans are drawn up and submitted to the Governor and the Office of Budget and Management.								